



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/626,587

07/25/2003

Chinyi Chiang

MR3003-55

9759

4586 7590 01/10/2007

ROSENBERG, KLEIN & LEE

3458 ELLICOTT CENTER DRIVE-SUITE 101

ELLICOTT CITY, MD 21043

EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
----------------------------------------	-----------	---------------

3 MONTHS

01/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/626,587

Applicant(s)

CHIANG, CHINYI

Examiner

YOUNG T. TSE

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-13) in the reply filed on December 08, 2006 is acknowledged.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The abstract of the disclosure is objected to because the words "transmitters", "receivers" and "detectors" (line 6) should be "transmitter", "receiver" and "detector" respectively; further, in line 10, the term "means of a" should be "the". Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities: at page 1, line 15, "ATA 100" should be "ATA100"; page 2, line 8, "IDE" is undefined. Appropriate correction is required.

Claim Objections

5. Claims s 1-13 are objected to because of the following informalities:

In claim 1, line 1, "ATA" should be "Advanced Technology Attachment (ATA)"; line 6, "control signals" should be "control signal"; line 11, "serializer/deserializer" and "said control signals" should be "at least one serializer/deserializer" and "said at least one control signal", respectively; line 15, "at least one transmitters" should be "a plurality of transmitters"; line 18, "at least one receivers" should be "a plurality of receivers"; line 23, "OOB" should be "out of band (OOB)"; and line 25, "at least one sets" should be "at least one set".

In claim 3, lines 2 and 3, "serializers" and "deserializers" should be "serializer" and "deserializer", respectively.

In claim 4, lines 1 and 2, "wherein a" and "each of said deserializers" should be "wherein an" and "said at least one deserializer", respectively.

In both claims 5 and 9, line 2, "phase locked loop" should be "at least one phase locked loop".

In claim 6, line 2, "control signals comprise" should be "at least one control signal comprises".

In claim 7, line 2, "control signals further comprise" should be "at least one control signal further comprises".

In claim 11, line 2, "selectors, one input of each" should be "selector, one input"; line 3, "said serializer" and "said receiver" should be "said at least one serializer" and

"said at least one receivers", respectively; and line 4, "may be connected to said deserializer" should be "being connected to said at least one deserializer".

In claim 13, line 2, "connecting to" should be "connection between said physical layer and".

The dependent claims 2, 8, 10 and 12 are objected to because they depend on the independent claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 22, the term "for transmitting said decoder/encoder" is not understood because "the decoder/encoder" is a device(s).

In claim 10, line 3, the term "connected devices" is not understood because it is unclear which devices are referred to in the precedent claim(s).

In claim 13, line 2, "IDE" is undefined".

The dependent claims 2-9 and 11-12 are rejected to because they are directly or indirectly depended on the independent claim 1.

Allowable Subject Matter

8. Claims 1-13 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.
9. Claims 1-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rakib relates to a method and apparatus for transmitting large amounts of data between at least a first and second station over a single twisted pair and reducing cross talk in a network using carrierless amplitude modulation and phase modulation encoding with independent data clock source at each station.

Xiao et al. relates to a method and apparatus for generating clock signals in a high-speed digital transceiver.

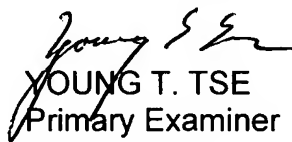
Shin et al. relates to a serial communications architecture for communicating between hosts and data store devices. A storage link architecture can provide packet ordering based on packet type, dynamic segmentation of packets, asymmetric packet ordering, packet nesting, variable-sized packet headers, and use of out-of-band symbols to transmit control information.

Chiang et al. relates to an ATA interface circuit and a signal encoding method for reducing the number of serial ATA external physical layer signals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


YOUNG T. TSE
Primary Examiner
Art Unit 2611